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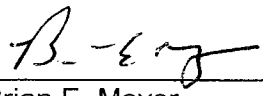
STC SA03022CH

INSTRUCTIONS FOR INSTALLATION  
OF A  
HARTZELL HC-C2YR-2C(L)EUIP/F(J)C7497 PROPELLER  
ON PIPER PA-44-180 AIRCRAFT

LOG OF REVISIONS

Revision	Revised Page(s)	Description of Revision	Engineer	Date
New	All	Original Release	L. Doud	5/23/11 

NOTE: All changes are indicated by a black vertical line along the left margin.

FAA Approved   
Brian E. Meyer  
ODA administrator  
Hartzell STC ODA-100082-CE

Date DEC. 19, 2011

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**INSTRUCTIONS FOR INSTALLATION  
OF  
HARTZELL HC-C2YR-2C(L)EUFP/F(J)C7497 PROPELLERS  
ON PIPER PA-44-180 AIRCRAFT**

*Please read these instructions and the Instructions for Continued Airworthiness before starting installation. If you have any questions regarding installation of this STC, please contact Hartzell Propeller at:*

*Phone: (937) 778-4379 or  
1-800-942-7767*

*E-mail: [techsupport@hartzellprop.com](mailto:techsupport@hartzellprop.com)*

**GENERAL**

These STC installation instructions provide the necessary information to install HC-C2YR-2C(L)EUFP/F(J)C7497 propellers with either the C-2285-3(L)(P) two-piece-dome spinners or D-6974-1(P) one-piece-dome spinners on the Piper PA-44-180 Seminole aircraft.

It is responsibility of the installer to verify compatibility of this STC with previously approved modifications.

**APPLICABLE MODELS**

Piper Models PA-44-180(Seminole) as listed below:

(All eligible models use Lycoming (L)O-360-E1A6D or (L)O-360-A1H6 engines rated 180 Hp @ 2700 RPM)

Aircraft Model	Aircraft Serial Number
PA-44-180	44-7995001 thru 44-8195026
PA-44-180	4495001 thru 4495013, 4496001 and up

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**INSTRUCTIONS FOR INSTALLATION  
OF  
HARTZELL HC-C2YR-2C(L)EUFP/F(J)C7497 PROPELLERS  
ON PIPER PA-44-180 AIRCRAFT**

1. Remove the original propellers and spinners per the applicable aircraft maintenance manual procedures.
2. Perform pre-installation procedures and check propeller aircharge per the "Installation and Removal" section of Hartzell Owner's Manual 115N prior to propeller installation.
3. Install the spinner bulkhead on the new propeller hub per Hartzell Owner's Manual 115N using the "metal spinner bulkhead on propeller hub" instructions.

NOTE: The D-6974-1(P) single-piece dome spinner, a 0.195" spacer is placed between the bulkhead and propeller hub. The C-2285-3(L)(P) two-piece spinner uses a 0.250" spacer between the bulkhead and hub.

4. Install new propellers and spinner dome on aircraft in accordance with Hartzell Owner's Manual number 115N. Follow installation instructions for "Installation of "R" Flange Propellers" in Manual 115N. Also reference the Piper service manual section appropriate to the aircraft S/N and configuration being modified.

NOTES: 1) The C-2285-3L(P) two-piece spinner is used on the right engine, the C-2285-3(P) is used on the left engine.

2) Use the "Single Piece Spinner Dome" procedure when installing the dome for the D-6974-1(P) spinner. Use the "Two-Piece Spinner Dome (Procedure 2)" instructions for the C-2285-3(L)(P) spinner.

5. Attach Hartzell Propeller Inc. Airplane Flight Manual Supplement AFMS\_052311 to the existing Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.
6. Revise weight and balance records to show:

**Removal** of the original propellers and spinners

Check equipment list in Pilot's Operating Handbook/FAA Approved Airplane Flight Manual for appropriate propeller weight and moment arm.

Example:

Weight of propeller = 65.0 lbs (from 1978 Seminole equipment list)  
Moment arm = 31.4 in.

Weight of spinner = 3.8 lbs (from 1978 Seminole equipment list)

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Moment arm = 29.6 in.

NOTE: It is recommended the installer weigh the removed propellers to confirm this weight in order to accurately calculate the new weight and balance.

**Installation** of Hartzell HC-C2YR-2C(L)EUFP/F(J)C7497 propeller and either Hartzell C-2285-3(L)(P) spinner or D-6749-1(P) spinner:

Weight of propeller = 68.0 lbs  
Moment arm = 31.4 inches

Weight of C-2285-3(L)(P) spinner = 3.8 lbs  
Moment arm = 29.6 in.

OR

Weight of D-6974-1(P) spinner = 3.5 lbs.  
Moment arm = 29.6 in.

7. Perform ground engine run for a functional and leak check of the Hartzell propeller installation.
8. Make the appropriate logbook entries and return aircraft to service with FAA Form 337 referencing STC.
9. Fly a functional check-flight using normal procedures, note maximum RPM setting and readjust governor high-RPM stop if necessary.
10. Post-installation dynamic balance of the propeller/engine combination is recommended, but not required, per Section 61-00-15 of Hartzell Owner's Manual 115N.

END